

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
23 December 2004 (23.12.2004)

PCT

(10) International Publication Number
WO 2004/111655 A1

(51) International Patent Classification⁷: **G01N 33/68**

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(21) International Application Number:
PCT/US2004/019343

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(22) International Filing Date: 14 June 2004 (14.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/478,645 12 June 2003 (12.06.2003) US
60/561,945 14 April 2004 (14.04.2004) US

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE; LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

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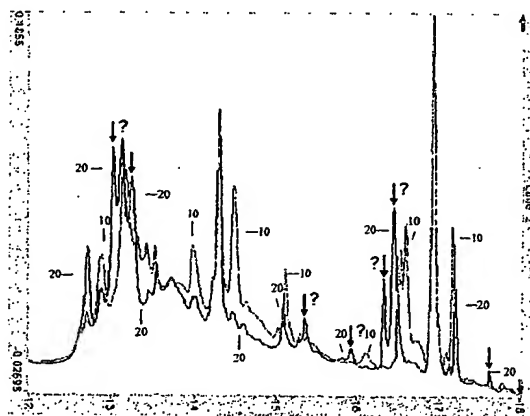
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Published:

— with international search report

[Continued on next page]

(54) Title: SYSTEMS AND METHODS FOR CHARACTERIZATION OF MOLECULES



(57) Abstract: The present invention generally provides systems and methods for the detection, identification, or characterization of differences between properties or behavior of corresponding species in two or more mixtures comprised of molecules, including biomolecules and/or molecules able to interact with biomolecules, using techniques such as partitioning. The experimental conditions established as distinguishing between the mixtures of the molecules using the systems and methods of the invention can also be used, in some cases, for further fractionation and/or characterization of the biomolecules and/or other molecules, using techniques such as single-step or multiple-step extraction, and/or by liquid-liquid partition chromatography. The methods could also be used for discovering and identifying markers associated with specific diagnostics, and can be used for screening for such markers once discovered and identified during diagnostics screening.

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— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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